

WHAT IS CLAIMED IS:

1. An image signal processing device for executing signal processing on image data representative of an input image, said device comprising:

a signal processing circuit for executing signal processing on the image data for correction and recording, and executing noise reduction on individual image data in accordance with at least one of image inputting conditions and a pixel level;

said signal processing circuit comprising:

a threshold generating circuit for generating a threshold by taking account of at least one of the image inputting conditions and the pixel level; and

a noise reducing circuit for producing, during the noise reduction, a difference in level between subject pixel data whose noise is to be detected and a mean value of said subject pixel data and pixel data around said subject pixel data, and selecting either one of said subject pixel data and said mean value in accordance with said difference and the threshold.

2. The device in accordance with claim 1, wherein said threshold generating circuit comprises:

a condition collecting circuit for collecting various conditions for determining the threshold; and

a calculating circuit for calculating the threshold in accordance with the conditions collected.

3. The device in accordance with claim 2, wherein said threshold generating circuit further comprises a threshold correcting circuit for correcting the threshold in accordance with a level of the subject pixel data.

4. The device in accordance with claim 3, wherein said condition collecting circuit collects at least one of pickup

sensitivity, an exposing condition, a shooting mode, sharpness, a kind of a light source, an operation, and a display magnification.

5. The device in accordance with claim 1, wherein said noise reducing circuit comprises:

a difference calculating circuit for calculating a difference in level between the subject pixel data and the pixel data around said subject pixel data;

a mean value calculating circuit for calculating a mean value of the subject pixel data and the pixel data around said subject pixel data;

a comparing circuit for comparing the difference and the threshold to thereby determine which of the subject pixel data and the mean value should be used; and

a switch for selecting either one of the subject pixel data and the mean value in accordance with a result of comparison output from said comparing circuit.

6. The device in accordance with claim 5, wherein said mean value calculating circuit multiplies each pixel data around the subject pixel data by a particular weighting coefficient on the basis of a position of said pixel data to thereby calculate the mean value.

7. An method of processing image data representative of an input image to thereby generate an image, comprising:

a first step of collecting image inputting conditions under which the image is input;

a second step of calculating a threshold for determining, based on the image inputting conditions, whether or not to use subject pixel data to which noise reduction is to be applied;

a third step of calculating a mean value of a level of the subject pixel data and levels of pixel data around said subject pixel;

a fourth step of producing a difference between the level of the subject pixel data and the mean value; and

a fifth step of comparing the difference and the threshold to thereby select either one of the subject pixel data and the mean value.

8. The method in accordance with claim 7, further comprising the step of correcting the threshold value calculated in said second step before said fifth step.

9. The method in accordance with claim 7, wherein the image inputting conditions comprise at least one of pickup sensitivity, an exposing condition, a shooting mode, sharpness, a kind of a light source, an operation, and a display magnification.

10. The method in accordance with claim 8, wherein the image inputting conditions comprise at least one of pickup sensitivity, an exposing condition, a shooting mode, sharpness, a kind of a light source, an operation, and a display magnification.

11. The method in accordance with claim 7, wherein said third step comprises the step of multiplying each pixel data around the subject pixel data by a particular weighting coefficient on the basis of a position of said pixel data to thereby calculate the mean value.